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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443,401	11/19/1999	SAID ZAMANI-KORD	10991745-1	7179

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EXAMINER

DICUS, TAMRA

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/443,401

Applicant(s)

ZAMANI-KORD ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 4, 6, -18, 20-28, 32, 35-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 4, 6, 7, 9-18, 20-28, 32 and 35-37 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the appeal brief filed on 1-27-05, PROSECUTION IS HEREBY REOPENED.

A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The finality of the Office action mailed is hereby withdrawn in view of the new ground of rejection set forth below.

Claim Objections

3. Claims 2, 4, and 6-11 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claims depend from claim 13, which is not a previous claim. See also MPEP 608.01(n).

4. Claim 4 is objected to because it recites aluminum oxide as AlO_3 , the proper chemical formula is Al_2O_3 .

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 15-18 and 20-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 and 24-38 of U.S. Patent No.

6,766,953 B1 to Huston et al. in view of USPN 5,723,202 to Mueller et al.

Although the conflicting claims are not identical, they are not patentable distinct from each other because the present claims differ only in the recitation of a reflective barrier structure. See Huston patent claims 24-38.

Mueller teaches tape having reflective aluminum on plastic PET substrate is employed because the thermal expansion is similar (col. 5, lines 35-50) where the reflective surface is included to detect an edge sensor where the new transparent print medium having the reflective trips permits a plotter to print images onto transparent medium (col. 5, lines 50-56).

It would have been obvious to one of ordinary skill in the art to have modified the claims of Huston to further include a reflective barrier structure because Mueller teaches tape having reflective aluminum on plastic PET substrate is employed because the thermal expansion is similar (col. 5, lines 35-50 of Mueller) where the reflective surface is included to detect an edge

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sensor where the new transparent print medium having the reflective trips permits a plotter to print images onto transparent medium (col. 5, lines 50-56 of Mueller).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2, 4, 6, 9-13, 32, and 35-37 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,089,614 to Howland et al.

Howland teaches a machine-readable indicia-bearing substrate structure (Howland, col. 3, lines 20-22 - “indicia may define machine readable images”), comprising: a substrate having a first surface and a second surface (plastic substrate-Howland, col. 6, line 46); a first information bearing indicia defined by a fluorescent material positioned adjacent to the first surface (Howland, 7, Fig.4.); a second information bearing indicia defined by a fluorescent material positioned adjacent to the second surface (Howland, 9, Fig.4.) (Howland, col. 3, lines 12-15 and col. 5, line 60-col. 6, line 7); and means for preventing interference between a first fluorescing signal emitted by the first indicia and a second fluorescing signal emitted by the second indicia (Howland, 10 below 7 and 10 over 9, Fig. 4., instant claims 6, 12, and 13) during a detection process for reading information (intended use, suggestive language does not limit the claim)

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from said first indicia or said second indicia, in which detection process the substrate structure is illuminated by illumination energy of a predetermined wavelength or wavelength range which causes said fluorescent material to fluoresce (process-derived limitation, patentability of an article depends on the article itself and not the method used to produce it, see MPEP 2113), said means including a reflective layer structure positioned between the first indicia and the second indicia (Howland, 10, Fig. 4.), said reflective layer structure having sufficient thickness and opaqueness to prevent passage there through of said first fluorescing signal and said second fluorescing signal and to reflect said illumination energy (inherent as the same materials (“thin aluminum, metal oxide film is highly reflective”, Howland, col. 3, line 31-instant claim 2, 4, 6, 12-13, and 35-37) and ordered structure is provided absent any evidence to the contrary), further comprising a sheet of a print medium (Howland 1, Fig. 4. and banknote at col. 6, lines 37-38 and 45), and said substrate structure (includes planar substrate structure) is adhered to a surface of the sheet of the print medium (Howland, col. 6, lines 45-46, includes planar sheet of print medium of instant claims 35-37). Fig. 4 of Howland anticipates the structure as claimed in instant claims 2, 6, 12, 13, 32, and 35-37. To claim 13, how indicia are applied during a printing process is a process-derived limitation; further indicia 7 and 9 are printed in the same way on substrates (Fig. 4. and col. 6, line 37-38). Both the prior art and Applicant's product are the same.

Regarding claim 11, Howland teaches the substrate structure of Claim 13 wherein the first indicia and the second indicia are arranged in an overlapping relationship (Howland, col. 5, line 58 and col. 11, lines 20-62).

To claim 9, Howland teaches the substrate structure of Claim 13 wherein the substrate is paper or plastic (col. 4, lines 37-43).

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To claim 10, Howland teaches the substrate structure of Claim 13 wherein said fluorescent material is a material which fluoresces energy at a wavelength within the spectral region between 200 and 1100 nanometers upon excitation by excitation radiation (Howland, col. 3, lines 15-22 and col. 6, lines 5-8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,089,614 to Howland et al., as applied to claim 13, in view of USPN 5,698,839 to Jagielinski et al.

Howland teaches the claimed invention above applied to claim 13. Howland does not teach including reflective radiation blocking materials dispersed within said substrate of instant claim 7.

Howland teaches a substrate of plastic such as a credit card. Jagielinski teaches a plastic credit card substrate having reflective metal alumina, aluminum oxide and colored pigments of antimony doped tin oxide dispersed in the plastic substrate which provides a reflective surface suitable for receiving indicia and reflecting in the visible region (Jagielinski, col. 4, lines 24, 40-68).

It would have been obvious to one of ordinary skill in the art to have modified the structure of Howland to include reflective radiation blocking materials dispersed within a substrate as claimed because Jagielinski teaches reflective metal alumina, aluminum oxide and

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colored pigments of antimony doped tin oxide dispersed in a plastic substrate provides a reflective surface suitable for receiving indicia and reflecting in the visible region (Jagielinski, col. 4, lines 24, 40-68).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,089,614 to Howland et al., in view of USPN 5,492,370 to Chatwin et al.

Howland teaches the elements of claim 14:

Howland teaches a machine-readable indicia-bearing substrate structure (Howland, col. 3, lines 20-22 - "indicia may define machine readable images"), comprising: a substrate having a first surface and a second surface (plastic substrate-Howland, col. 6, line 46); a first information bearing indicia defined by a fluorescent material positioned adjacent to the first surface (Howland, 7, Fig.4.); a second information bearing indicia defined by a fluorescent material positioned adjacent to the second surface (Howland, 9, Fig.4.) (Howland, col. 3, lines 12-15 and col. 5, line 60-col. 6, line 7); and means for preventing interference between a first fluorescing signal emitted by the first indicia and a second fluorescing signal emitted by the second indicia (Howland, 10 below 7 and 10 over 9, Fig. 4.) during a detection process for reading information (intended use, suggestive language does not limit the claim) from said first indicia or said second indicia, in which detection process the substrate structure is illuminated by illumination energy of a predetermined wavelength or wavelength range which causes said fluorescent material to fluoresce (process- derived limitation, patentability of an article depends on the article itself and not the method used to produce it, see MPEP 2113), said means including a reflective layer structure positioned between the first indicia and the second indicia (Howland, 10, Fig. 4.), said reflective layer structure having sufficient thickness and opaqueness to prevent passage there

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through of said first fluorescing signal and said second fluorescing signal and to reflect said illumination energy (inherent as the same materials (“thin aluminum, metal oxide film is highly reflective”, Howland, col. 3, line 31) and ordered structure is provided absent any evidence to the contrary). Both the prior art and Applicant’s product are the same.

Howland teaches further comprising a sheet of a print medium (Howland 1, Fig. 4. and banknote at col. 6, lines 37-38 and 45).

Howland teaches all the elements of claim 14 but does not teach further comprising a sheet of a print medium in roll form.

Chatwin teaches a indicia bearing structure where at col. 6, line 39, the substrate may be in roll form (claim 14). Hence it would have been obvious to one of ordinary skill in the art to modify the structure of Howland to include a substrate in roll form since Chatwin teaches a substrate can be in roll form to be cut and sized at col. 6, lines 40-43.

Allowable Subject Matter

7. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Howland does not teach or suggest including a structure where thin layers of additional substrates surround a reflective layer.

8. Claim 15 would be allowable if a terminal disclaimer is submitted.

Response to Arguments

9. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Howland is still used to teach the structure of machine-readable indicia-bearing

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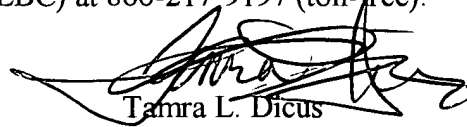
articles. Chatwin is still used to teach a substrate is in roll form. Additional references of interest are cited on the 892.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tamra L. Dicus
Examiner
Art Unit 1774

3/25/05



RENA DYE
SUPERVISORY PATENT EXAMINER
A.U. 1774 4/4/05